

REMARKS

Claims 1-44 are pending in this application. By this Amendment, claims 30 and 36 are amended. Claims 41-44 are added. No new matter is added by these amendments.

Claims 1-24, 27, 33, 34, 37 and 38 are provisionally withdrawn from consideration as drawn to a non-elected group of claims and/or species. Reconsideration of the application based on the above amendments, and the following remarks is respectfully requested.

The Office Action, in paragraph 1, makes final the Restriction and Election of Species Requirements. Claims 1-24, 27, 33, 34, 37 and 38 are withdrawn as drawn to non-elected inventions and/or species.

It was alleged in the Restriction and Election of Species Requirement issued December 15, 2005, that the product of Group I can be made by a materially different method, such as one that assembles the structure with no heating or pressing. Applicant respectfully asserts that the use of the thermosetting resin necessitates the need for heating as recited in the subject matter of the claims identified in Group I. Additionally, connecting the land to the terminal, as positively recited in at least independent claims 1, 4 and 18 includes the pressing together of the land and the terminal to provide a predetermined wiring pattern. For at least this reason, the assertion in the December 15 Restriction and Election of Species Requirement discussed above is in error. As such, rejoinder and examination of all of the non-elected claims is respectfully requested.

Claims 25, 28-30, 35, 36, 39 and 40 are identified by the Examiner as being generic claims to Group IIB. Applicant respectfully asserts that in the event the restriction requirement is not withdrawn, that at least claim 27 should be rejoined on the allowance of the generic claims, specifically independent claim 25, based on the dependence of claim 27 directly on claim 25.

The Office Action, in paragraph 4, objects to the Abstract for failing to include any process steps of the claimed invention. Applicant respectfully submits that the Abstract, as presently recited, adequately discusses the subject matter of the pending claims. In the event that withdrawn claims 1-24, 27, 33, 34, 37 and 38 are later canceled, Applicant will amend the Abstract to relate only to a manufacturing method. Reconsideration and withdrawal of the objection to the Abstract is respectfully requested.

The Office Action, in paragraph 5, objects to the title of the invention as being non-descriptive. The title, as presently disclosed, Inkjet Head and Manufacturing Method of the Same, adequately describes the subject matter of the pending claims. In the event that withdrawn claims 1-24, 27, 33, 34, 37 and 38 are canceled, Applicant will amend the title to recite only a manufacturing method as recommended by the Examiner. Reconsideration and withdrawal of the objection to the title is respectfully requested.

The Office Action, in paragraph 7, rejects claims 25, 26, 29, 31, 32 and 35 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,000,127 to Eifuku et al. (hereinafter "Eifuku"). Applicant respectfully traverses this rejection.

Eifuku discloses an electronic parts mounting method (Abstract). The Office Action asserts that Eifuku teaches many of the features of independent claims 25 and 31. However, Eifuku does not teach that the land is disposed on the piezoelectric element in a region opposed to the wall portion of the pressure chamber, as is positively recited in independent claims 25 and 31. Rather, Eifuku discloses a general electronic parts mounting method and is, therefore, silent regarding the claimed method, including electrically connecting to a land disposed on the piezoelectric element in a region opposed to the wall portion of the pressure chamber, as recited in independent claims 25 and 31.

The Office Action asserts that these limitations, as discussed above and as recited in the preamble of the claims are intended use limitations and have not been given patentable

weight since the body of the claims do not depend upon the preamble for completeness and the process steps are able to stand alone. The Office Action cites *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (C.C.P.A. 1976) in support of this assertion. Applicant submits that the citation from *In re Hirao* is incomplete. *In re Hirao* cites *Kropa v. Robie*, 187 F.2d 150, 38 CCPA 858, 88 USPQ 478 (1951) as the original case for the quotation. Referring to *Kropa*, the court held that where the preamble to the claim was expressly, or by necessary implication, given the effect of a limitation, the introductory phrase was deemed essential to point out the invention defined by the claim. Further, the preamble was considered necessary to give life, meaning and vitality to the claims. As such, the case citation relied on by the Office Action, when viewed in its entirety, supports MPEP §2111.02 which states, "[i]f the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is 'necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim," *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999).

Applicant submits that in the subject matter of the pending claims the preamble is 'necessary to give, life, meaning, and vitality' to the claim. This is evidenced in the stated objective of the present invention, in providing an inkjet head capable of suppressing hindrance of deformation of a piezoelectric element, and to provide a manufacturing method therefore (paragraph [0007]). The deformation occurring when the land is located on the piezoelectric element opposing the pressure chamber. The subject matter of the pending claims, as recited in at least the preamble to independent claims 25 and 31, discloses the land disposed on the piezoelectric element in a region opposed to the wall portion. Therefore, the process of electrically connecting the land and the terminal with a metallic bond in a region between the land and the terminal and a region extending over the land and the terminal relates to that position described in the preamble as being opposed to a wall portion. By

creating a device using this method, the application of the solder and the thermosetting resin does not interfere with the piezoelectric element opposed to the pressure chamber.

For at least the above reason, Eifuku fails to anticipate the combination of all the features recited in independent claims 25 and 31. Further, claims 26, 29, 32 and 35 are also not taught by the applied prior art reference for at least the respective dependence of these claims on allowable independent claims 25 and 31, as well as for the separately patentable subject matter that each of these claims recite.

Accordingly, reconsideration and withdrawal of the rejection of claims 25, 26, 29, 31, 32 and 35 under 35 U.S.C. §102(b) as being anticipated by Eifuku are respectfully requested.

The Office Action, in paragraph 9, rejects claims 25, 26, 28-32, 35, 36, 39 and 40 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,270,193 to Hiwada (hereinafter "Hiwada") in view of Eifuku. Applicant respectfully traverses this rejection.

Hiwada discloses a method of manufacturing an ink-jet recording apparatus and connecting an actuator unit, *i.e.*, a driver circuit, to a printed circuit board (Abstract). Specifically, Hiwada teaches connecting the head electrodes, input (68) and output (69), of the IC chip (60), mounted on the exterior of the head (21) with the FPC (72). As such, Hiwada does not pertain to pressure chambers in inkjet heads.

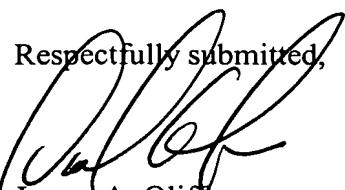
The Office Action asserts, that Hiwada teaches disposing a metallic bond and a conductive adhesive between a terminal and the land. However, the reference does not teach disposing a metallic bond and a thermosetting resin between the terminal and the land disposed on the piezoelectric element in a region opposed to the wall portion, as is recited in the rejected claims. Rather, Hiwada is silent regarding any type connection to the land located on the piezoelectric element in a region opposed to the wall portion because Hiwada merely relates to a driver circuit. As Hiwada does not overcome the deficiencies of Eifuku, the combination of references fails to render the claims obvious.

For at least the above reason, the applied prior art references cannot reasonably be considered to teach, or to have suggested, the combination of all the features recited in independent claims 25 and 31. Further, claims 26, 28-30, 32, 35, 36, 39 and 40 would also not have been suggested by the applied prior art references for at least the respective dependence of these claims on allowable independent claims 25 and 31, as well as for the separately patentable subject matter that each of these claims recite.

Accordingly, reconsideration and withdrawal of the rejection of claims 25, 26, 28-32, 35, 36, 39 and 40 under 35 U.S.C. §103(a) as being unpatentable over the applied references are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-44 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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Attachment:
Petition for Extension of Time

Date: August 21, 2006

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